

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
23 September 2004 (23.09.2004)

PCT

(10) International Publication Number  
WO 2004/081310 A3

(51) International Patent Classification<sup>7</sup>: E04B 1/12

(21) International Application Number:  
PCT/RO2004/000005

(22) International Filing Date: 8 March 2004 (08.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
a2003 00214 12 March 2003 (12.03.2003) RO

(71) Applicant and

(72) Inventor: LADICO, Dan, R. [RO/RO]; B-dul Unirii  
37-A4, Sc.3, ap. 57, sector 3, R-Bucharest 3 (RO).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,

PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

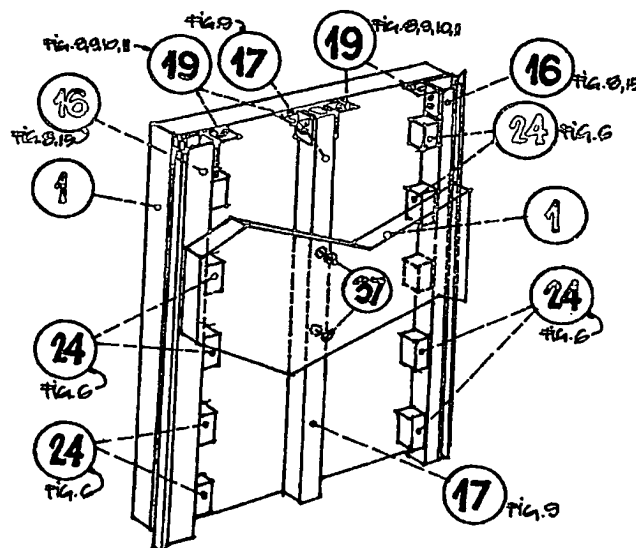
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
25 November 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THE STRUCTURE AND THE ENVELOPE OF A PREFABRICATED PANEL BUILDING AND THE METHOD OF ASSEMBLY



(57) Abstract: The Object of this Invention is the Structure and the Envelope of a Building made with Prefabricated Panels and the Method of Assembly. The novelty resides in the use of a building structure as an articulated steel frame made of steel tubes for vertical members, continuous perimeter steel plates, open web steel trusses for floor's structural elements, compressed agricultural fiber panels which sandwich all structural elements and the method of assembling these components as a light, earthquake resistant, easy to assemble, environmentally safe building and several other new properties.

WO 2004/081310 A3

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/R02004/000005

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 E04B1/12

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 E04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 427 407 B1 (WILSON STUART) 6 August 2002 (2002-08-06) column 3, line 47 - column 9, line 13; figures 5,9	1,5,6
X	US 4 936 540 A (BOESHART PATRICK E) 26 June 1990 (1990-06-26) figure 10	2
X	US 2002/134036 A1 (PONKO EDMUND L ET AL) 26 September 2002 (2002-09-26) page 6, paragraph 74; figure 8	3
Y	US 6 263 636 B1 (CORSTON CHARLES) 24 July 2001 (2001-07-24) abstract	4
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*&\* document member of the same patent family

Date of the actual completion of the international search

5 October 2004

Date of mailing of the international search report

13/10/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Nilsson, L

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/RO2004/000005

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 02/101169 A (NIPPON STEEL CORP ; SHIMIZU JUN (JP); KAWAI YOSHIMICHI (JP)) 19 December 2002 (2002-12-19) figures 3,4 -----	4
A	CA 2 274 287 A (DI LORENZO NICK) 9 December 1999 (1999-12-09) the whole document -----	1-6
A	US 5 608 999 A (MCNAMARA BERNARD) 11 March 1997 (1997-03-11) the whole document -----	1-6

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No  
PCT/R02004/000005

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6427407	B1	06-08-2002	CN 1272582 A CA 2299925 A1 JP 2000309991 A	08-11-2000 30-09-2000 07-11-2000
US 4936540	A	26-06-1990	US 4938449 A	03-07-1990
US 2002134036	A1	26-09-2002	US 6761005 B1 US 6301854 B1 US 2004074178 A1 US 2002035815 A1 AU 731914 B2 AU 6267999 A CA 2319346 A1 EP 1253256 A2 EP 1049836 A1 TR 200002115 T1 WO 0031354 A1	13-07-2004 16-10-2001 22-04-2004 28-03-2002 05-04-2001 13-06-2000 02-06-2000 30-10-2002 08-11-2000 22-01-2001 02-06-2000
US 6263636	B1	24-07-2001	US 5718092 A US 5403414 A CA 2146055 A1 CA 2063629 A1 US 5254203 A	17-02-1998 04-04-1995 22-03-1996 19-03-1993 19-10-1993
WO 02101169	A	19-12-2002	JP 2002364113 A WO 02101169 A1 TW 539796 B US 2004154257 A1	18-12-2002 19-12-2002 01-07-2003 12-08-2004
CA 2274287	A	09-12-1999	CA 2240098 A1 CA 2274287 A1 AU 5381400 A WO 0077317 A1 EP 1185748 A1 US 6698150 B1 US 2004139674 A1 US 6260320 B1	09-12-1999 09-12-1999 02-01-2001 21-12-2000 13-03-2002 02-03-2004 22-07-2004 17-07-2001
US 5608999	A	11-03-1997	NONE	